

Application/Control Number : 10/691,589  
Art Unit: 3736  
January 30, 2006  
Page 3

comprising a hollow provided centrally in said cavity, said hollow forming a guide for guiding the needle upon insertion thereof in said piercing guiding point and through the stopper for blood collection.

7. (new) The blood collection tube with sealing stopper of claim 3, wherein said external cavity comprises an edge, said annular lip protruding radially inward from said edge so as to surround said central region opening and to form in said cavity the annular groove that surrounds said piercing guiding point.

8. (new) The blood collection tube with sealing stopper of claim 3, wherein said opening is shaped so as to allow at least free passage of the needle covered by an elastic sheath.

9. (new) The blood collection tube with sealing stopper of claim 3, wherein the stopper comprises a bottom, inner face formed by a collar and by a concentric cylindrical protrusion that is enclosed by said collar so as to provide a seat therebetween, the tube being engageable with a mouth part thereof in said seat for double, inner and outer sealing engagement.

10. (new) In combination, a tube for collecting blood with a vacuum provided with a sealing stopper comprising a front- external face thereof and a piercing guiding point and a blood collection needle arrangement, the needle arrangement comprising a needle piercing end covered by an elastic sheath which is adapted to pierce through said stopper in said piercing guiding point for blood collection, and wherein said stopper further comprises: a peripheral region and a central region of said front, external face thereof, said central region being provided with an opening suitable to allow free passage of the needle piercing end covered by the elastic sheath to said piercing guiding point; an annular lip that is formed monolithic with said stopper on said external face thereof so as to protrude from said peripheral region radially towards said central region up to and around said opening; and an annular groove that is formed under said annular lip and between the annular lip and said front-external face and surrounds said piercing guiding point, said groove being shaped so as to retain and contain any blood drop that is entrained out of the tube and through the stopper upon withdrawal of the needle from the stopper.

Application/Control Number : 10/691,589  
Art Unit: 3736  
January 30, 2006  
Page 4

11. (new) A tube for collecting blood with a vacuum provided with a sealing stopper that sealingly close the tube for maintaining vacuum therein, the stopper comprising a front- external face thereof provided with a piercing guiding point suitable for a hollow needle to pierce axially therein and further through said stopper for blood collection into the tube, and wherein said stopper further comprises: a central region of said front-external face that is provided with an opening for allowing needle access to said piercing guiding point; an external cavity that is formed on said front-external face of the stopper and has a peripheral edge, said piercing guiding point being located in said cavity; an annular lip that is formed monolithic with said stopper so as to protrude radially inwardly from said peripheral edge of the cavity, over said external face of the stopper and towards said central region thereof and up to and around said opening; and an annular groove that is formed in said cavity, under said annular lip and between said annular lip and said external face and surrounds said piercing guiding point, said groove being shaped so as to retain and contain any blood drop that is entrained out of the tube and through the stopper upon withdrawal of the needle from the stopper.